

Contents

Volume 2, Number 1, February 1993

- 1 EDITORIAL
- FULL PAPERS
- 3 Molecular evidence for mating asymmetry and female choice in a pocket gopher (*Thomomys*) hybrid zone
J. L. Patton and M. F. Smith
- 9 Plasmid dynamics in a model soil column
L. Sun, M. J. Bazin and J. M. Lynch
- 17 Typing method for N₂-fixing bacteria based on PCR-RFLP — application to the characterization of *Frankia* strains
S. Jamann, M. P. Fernandez and P. Normand
- 27 Distribution of streptothricin acetyltransferase encoding determinants among environmental bacteria
K. Smalla, R. Prager, M. Isemann, R. Pukall, E. Tietze, J. D. van Elsland and H. Tschäpe
- 35 Monitoring the diversity of *Rhizobium meliloti* field and microcosm isolates with a novel rapid genotyping method using insertion elements
B. Kosier, A. Pühler and R. Simon
- 47 Plasmid and chromosomally encoded luminescence marker systems for detection of *Pseudomonas fluorescens* in soil
S. Amin-Hanjani, A. Miekke, L. A. Glover, J. I. Prosser and K. Killham
- SHORT COMMUNICATION
- 55 Typing of artiodactyl MHC-DRB genes with the help of intronic simple repeated DNA sequences
F. W. Schwaiger, J. Buitkamp, E. Weyers and J. T. Epplen
- TECHNICAL NOTE
- 61 *Mbol* and *Macrohaemolysis* — quality of DNA fingerprints is strongly enzyme-dependent in an insect (Coleoptera)
D. W. Zeh, C. A. May, M. A. Coffroth and E. Bermingham
- 64 FORTHCOMING PAPERS

Volume 2, Number 2, April 1993

- FULL PAPERS
- 65 Variable stability of antibiotic-resistance markers in *Bacillus cereus* UW85 in the soybean rhizosphere in the field
L. J. Halverson, M. K. Clayton and J. Handelsman
- 79 Determination of paternity in dragonflies by Random Amplified Polymorphic DNA fingerprinting
H. Hadrys, B. Schierwater, S. L. Dellaporta, R. Desalle and L. W. Buss

- 89 Genetic differentiation of cocoa (*Theobroma cacao* L.) populations revealed by RAPD analysis
J. R. Russell, F. Hosein, E. Johnson, R. Waugh and W. Powell
- 99 Molecular phylogeographic evidence for multiple shifts in habitat preference in the diversification of an amphipod species
M. J. Stanhope, B. Hartwick and D. Baillie
- 115 ITS primers with enhanced specificity for basidiomycetes — application to the identification of mycorrhizae and rusts
M. Gardes and T. D. Bruns
- MINIREVIEW
- 121 Screening techniques for detecting allelic variation in DNA sequences
E. P. Lessa and G. Applebaum
- 130 FORTHCOMING PAPERS
- 130 ANNOUNCEMENT

Volume 2, Number 3, June 1993

- FULL PAPERS
- 131 Detection of highly polymorphic microsatellite loci in a species with little allozyme polymorphism
C. R. Hughes and D. C. Queller
- 139 Cytonuclear genetic architecture in mosquitofish populations and the possible roles of introgressive hybridization
K. T. Scribner and J. C. Avise
- 151 Detection and analysis of genetic variation in *Hordeum spontaneum* populations from Israel using RAPD markers
I. K. Dawson, K. J. Chalmers, R. Waugh and W. Powell
- 161 Phylogeny and historical aspects of the ecology of eastern Australian scrubwrens *Sericornis* spp. — evidence from mitochondrial DNA
L. Joseph and C. Moritz
- 171 Plasmid DNA in a groundwater aquifer microcosm — adsorption, DNAase resistance and natural genetic transformation of *Bacillus subtilis*
G. Romanowski, M. G. Lorenz and W. Wackernagel
- 183 Mitochondrial DNA phylogeography in northern grasshopper mice (*Onychomys leucogaster*) — the influence of Quaternary climatic oscillations on population dispersion and divergence
B. R. Riddle, R. L. Honeycutt and P. L. Lee
- 194 FORTHCOMING PAPERS

Volume 2, Number 4, August 1993

FULL PAPERS

- 195 VNTR loci reveal differentiation between and structure within populations of the eastern barred bandicoot *Perameles gunnii*
N. A. Robinson, N. D. Murray and W. B. Sherwin
- 209 A case study of the interpretation of linkage data using DNA fingerprinting probes
J. F. Y. Brookfield, R. E. Carter, G. C. Mair and D. O. F. Skibinski
- 219 The perils of single gene trees – mitochondrial versus single-copy nuclear DNA variation in white-eyes (Aves: Zosteropidae)
S. M. Degan
- 227 Segregation analysis of random amplified polymorphic DNA (RAPD) markers in *Picea abies*
G. Bucci and P. Menozzi
- 233 Molecular tools for the identification of ectomycorrhizal fungi – taxon-specific oligonucleotide probes for suilloid fungi
T. D. Bruns and M. Gardes
- 243 Use of random amplified polymorphic DNA (RAPD) for generating specific DNA probes for microorganisms
R. Fani, G. Damiani, C. Di Serio, E. Gallori, A. Grifoni and M. Bazzicalupo
- 251 Genetic consequences of an invasion through a patchy environment – the cynipid gallwasp *Andricus quercus-calicis* (Hymenoptera: Cynipidae)
G. N. Stone and P. Sunnucks
- TECHNICAL NOTE
- 269 Multilocus fingerprinting using oligonucleotide probes reveals a highly polymorphic single locus system in great tits *Parus major*
T. Lubjuhn, C. Epplen, J. Brün and J. T. Epplen
- PRIMER NOTE
- 271 Characterization of hypervariable microsatellite loci in the threespine stickleback *Gasterosteus aculeatus*
C. Rico, D. Zadworny, U. Kuhnlein and G. J. FitzGerald
- 273 BOOK REVIEW
- 274 FORTHCOMING PAPERS

Volume 2, Number 5, October 1993

FULL PAPERS

- 275 Dominant vs. codominant genetic markers in the estimation of male mating success
B. G. Milligan and C. K. McMurtry
- 285 The cloning and characterization of phage promoters, directing high expression of luciferase in *Pseudomonas syringae* pv. *phaseolicola*, allowing single cell and microcolony detection
R. N. Waterhouse, D. J. Silcock, H. L. White, H. K. Buhariwalla and L. A. Glover

- 295 Comparison of geographically distant populations of *Rhizobium* isolated from root nodules of *Phaseolus vulgaris*
E. Geniaux, G. Laguerre and N. Amarger
- 303 Recombinant and wild-type *Pseudomonas aureofaciens* strains in soil: survival, respiratory activity and effects on nodulation of whitebean *Phaseolus vulgaris* L. by *Rhizobium* species
L. S. England, H. Lee and J. T. Trevors
- 315 The analysis of paternity and maternity in the marine hydrozoan *Hydractinia symbiolongicarpus* using randomly amplified polymorphic DNA (RAPD) markers
D. R. Levitan and R. K. Grosberg
- OPINION ARTICLE
- 329 Nontarget and ecological effects of transgenically altered disease resistance in crops – possible effects on the mycorrhizal symbiosis
R. M. Miller

Volume 2, Number 6, December 1993

FULL PAPERS

- 337 Native oak chloroplasts reveal an ancient divide across Europe
C. Ferris, R. P. Oliver, A. J. Davy and G. M. Hewitt
- 345 Molecular genetic evidence for reproductive isolation between sympatric populations of smelt *Osmerus* in Lake Utopia, south-western New Brunswick, Canada
E. B. Taylor and P. Bentzen
- 359 Rapid assessment of single-copy nuclear DNA variation in diverse species
R. W. Slade, C. Moritz, A. Heideman and P. T. Hale
- 375 Using molecular and ecological data to diagnose endangered populations of the puritan tiger beetle *Cicindela puritana*
A. P. Vogler, C. B. Knisley, S. B. Glueck, J. M. Hill and R. DeSalle
- 385 Genetic structure of a natural population of *Dictyostelium discoideum*, a cellular slime mould
D. Francis and R. Eisenberg
- SHORT COMMUNICATIONS
- 393 Parentage analyses in ant colonies using simple sequence repeat loci
J. D. Evans
- 399 Sexing free-ranging brown bears *Ursus arctos* using hairs found in the field
P. Taberlet, H. Mattock, C. Dubois-Paganon and J. Bouvet
- PRIMER NOTE
- 405 Primers for the differential amplification of the sex-determining region Y gene in a range of mammal species
R. Griffiths and B. Tiwari
- 407 INDEX
- 410 FORTHCOMING PAPERS

